A prospective Nordic study on the use of chromogranin A for the prediction of progression in patients with pancreatic and small intestinal neuroendocrine tumours.

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Material & Methods

• In this non-interventional study, patients with GEP-NET and unknown primary NET under treatment with Sandostatin LAR or with non-somatostatin analog antitumour treatment, were observed up to a maximum of 24 month.
• 239 patients were included in Denmark, Norway and Sweden from December 2010 to December 2013. A CT was followed by at least one additional CT 1 - 24 months later.
• Matching pairs of CgA and CT assessments were defined for each individual (defined as an event):
  o Primary analysis: CgA within +/- 6 weeks to CT
  o Post-hoc analysis: CgA 3-6 month prior to CT
• Change in tumour size was defined as regression, progression, or stable disease by RECIST1.1. A 25% change in CgA discriminated between increased, unchanged or decreased plasma CgA levels.

Results

• Patients demographics and history was similar across subgroups (Table 1)
• Of 304 events in the post-hoc analysis, 58 showed progression, 228 stable disease, and 18 regression (complete and partial response). The median change in plasma CgA was +19(IQR:-20- (+57))%, -12(-37-(+23))% and -73(-83-(-55))%, respectively (Fig. 1)
• The overall Spearman’s rank correlation coefficient was 0.17 (p= 0.003), and 0.16 (p=0.07), 0.18 (p=0.04) and 0.20 (p=0.21) for small intestinal (137 events), pancreatic (123 events) and unknown GEP primary (40 events), respectively. (Table 2)

Conclusion

• This prospective observational study of patients with GEP-NET and unknown primary NET showed a positive correlation between CgA change from baseline and RECIST response. The predictive value of CgA change from baseline of RECIST response, however, remains to be established.
• This study was sponsored by Novartis

Background

• Retrospective studies showed that changes in plasma chromogranin A (CgA) may predict change in tumour burden in gastroenteropancreatic neuroendocrine tumour (GEP-NET) patients.
• The aim of this prospective study, was to compare the association between changes in plasma CgA and changes in tumor burden on CT in patients with GEP-NET and unknown primary NET with residual disease.